



Smiles for Ohio Fluoride Varnish Program

Fluoride Supplementation

Dietary fluoride supplements are available by prescription only. Physicians and dentists may prescribe dietary fluoride supplements **for infants and children who are not served by optimally fluoridated water**. When prescribed and used properly, fluoride supplements are an effective alternative when water fluoridation is not possible. Dietary fluoride supplements are available in two forms: drops for infants over 6 months of age and chewable tablets for children and adolescents.

Dietary Fluoride Supplement Schedule (1994)

Approved by the American Dental Association

American Academy of Pediatrics

American Academy of Pediatric Dentistry

<i>Age</i>	<i>Fluoride ion level in drinking water (ppm)*</i>		
	<0.3 ppm	0.3-0.6 ppm	>0.6 ppm
Birth - 6 months	None	None	None
6 months -3 years	0.25 mg/day**	None	None
3 - 6 years	0.50 mg/day	0.25 mg/day	None
6 - 16 years	1.0 mg/day	0.50 mg/day	None

* 1.0 part per million (ppm) = 1 milligram/liter (mg/L)

** 2.2 mg sodium fluoride contains 1 mg fluoride ion.

Important Considerations for Physicians Prescribing Fluoride Supplements

The prevention of dental caries by prescribing the appropriate dosage of fluoride in supplement form presents some challenges for the health professional. The following factors should be taken into consideration in order to determine the proper dosage:

- All sources of fluoride must be evaluated with a thorough fluoride history (drinking water at home and school, other beverages, foods, topical fluorides). Contact the Ohio Department of Health, Bureau of Oral Health Services for fluoridation status of community water systems in Ohio.
- If fluoride level is unknown, drinking water must be tested for fluoride content before supplements are prescribed. For testing of fluoride content contact the Ohio Department of Agriculture Laboratory (see "Procedure for Obtaining a Fluoride Analysis" in this notebook).

- It may be possible to have water fluoride content analyzed by the nearest local water treatment plant that conducts daily fluoride analysis.
- Exposure to multiple water sources can make proper prescribing complex. Keep in mind that many soft drinks and reconstituted juices are often processed with fluoridated water and this may lead to significant fluoride intake. If you are unable to make an assessment of the child's daily fluoride intake, it is better not to prescribe supplements at all. Ingestion of higher than recommended levels of fluoride by young children has been associated with an increase in dental fluorosis, primarily very mild and mild, in developing unerupted teeth. Mild fluorosis is characterized by white opaque "spots" or areas that involve less than 50 percent of the tooth surface.
- It is important to monitor patients and siblings on fluoride supplements. It is recommended that every six months the proper dosage is checked relative to the patient's current age. Note any changes in fluoride intake that might result through community water fluoridation, home well construction and prescriptions for fluoride supplements from other health professionals. If the child has had a change in where they spend portions of their waking hours (residence, child care or preschool) make necessary adjustments.
- Fluoride supplements require long-term compliance on a daily basis.

Remember:

If there is any doubt about the amount of fluoride contained in a patient's water supply, sample the water first, obtain the results and then calculate/prescribe the proper fluoride dosage.



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Procedure for Obtaining a Fluoride Analysis of a Water Sample

Laboratory services are available through the Ohio Department of Agriculture's Consumer Analytical Laboratory to determine the fluoride content of water samples taken from privately owned wells or other private water sources.

A LABORATORY HANDLING FEE OF \$18.00 WILL BE ASSESSED FOR EVERY SAMPLE ANALYZED.

Dentists, physicians or individuals can obtain the fluoride sample bottles and the necessary identification forms directly from:

Ohio Department of Agriculture
Consumer Analytical Laboratory
8995 E. Main Street, Building 3
Reynoldsburg, OH 43068
614-728-6230

The four-ounce bottles may be ordered one at a time or in boxes of one dozen if the health professional or health agency anticipates frequent requests for fluoride analyses (some physicians and dentists offer this service to all interested patients).

The individual performs the sampling procedure as follows:

1. Rinse the sample bottle.
2. Run cool water from the tap for about 30-60 seconds.
3. Fill the bottle two-thirds full from the tap and then close tightly.
(Persons with water softeners may have separate taps for softened and unsoftened water, so it is necessary that the sample be drawn from the drinking/cooking water source.)
4. Use black ink to complete forms.
5. Fill out the enclosed identification form to indicate name, date and place where sample was taken.
6. The laboratory must receive the sample within one week of collection.
7. The Ohio Department of Agriculture's Consumer Analytical Laboratory provides an analytical service only. Contact your physician, dentist or the Bureau of Oral Health Services for interpretation.

Enclose the sample and the sample submission form in a pre-addressed cardboard cylinder. Samples mailed via the U. S. Postal Service and bulk samples sent by United Parcel Service should be addressed to:

Ohio Department of Agriculture
Consumer Analytical Laboratory
8995 E. Main Street, Building 3
Reynoldsburg, OH 43068

The shipment must include the name and address of the person whose water is being analyzed and the name and address of the dentist, physician or agency requesting the analysis, if applicable. Please indicate whether the results are to be sent to the individual, his/her dentist or physician or the agency. If payment is not submitted with the sample, a \$10.00 Invoice Fee will be added to the \$18.00 laboratory charge.

The sample will be analyzed and the result and invoice for this service will be mailed or faxed to the party who receives the results. The results will normally be expressed in parts fluoride per million parts of water (ppm) or milligrams per liter of water (mg/l). It is important to remember that the optimum fluoride level for the proper development of bones and teeth is one part fluoride per million parts of water or one milligram of fluoride per liter of water.

It may also be possible to have an analysis performed by staff at a local water plant that has a laboratory certified to run fluoride tests. There may or may not be a handling fee involved. While water plant laboratories are not staffed to furnish the service for all property owners, they may try to accommodate individual requests on a first-come, first-served basis to the extent that their resources permit. It is recommended that you check your local telephone listings for the water treatment plant nearest you. Another way to obtain this information is to contact your district office of the Ohio Environmental Protection Agency.

For further information please contact:

Ohio Department of Health
Bureau of Oral Health Services
246 N. High St.
Columbus, OH 43215
(614) 466-4180

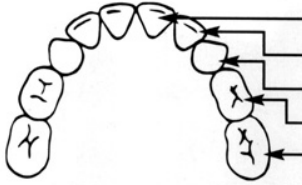
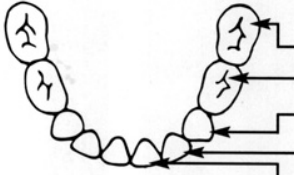


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TOOTH ERUPTION CHART

PRIMARY DENTITION

	Upper Teeth	Erupt	Exfoliate
	Central incisor	8-12 months	6-7 years
	Lateral incisor	9-13 months	7-8 years
	Canine (cuspid)	16-22 months	10-12 years
	First molar	13-19 months	9-11 years
	Second molar	25-33 months	10-12 years
	Lower Teeth	Erupt	Exfoliate
	Second molar	23-31 months	10-12 years
	First molar	14-18 months	9-11 years
	Canine (cuspid)	17-23 months	9-12 years
	Lateral incisor	10-16 months	7-8 years
	Central incisor	6-10 months	6-7 years